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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,650

09/21/2006

Yoshio Ueda

8028-1063

3003

466 7590 12/05/2008

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EXAMINER

NGO, CHUONG A

ART UNIT

PAPER NUMBER

4133

MAIL DATE

DELIVERY MODE

12/05/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,650	<b>Applicant(s)</b> UEDA, YOSHIO	
	<b>Examiner</b> CHUONG A. NGO	<b>Art Unit</b> 4133	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 16-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/21/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is in response to the Applicants' communication filed on 9/21/2006. In virtue of this communication, claims 16-18 are currently presented in the instant application.

### **Drawings**

2. The drawings submitted on 9/21/2006. These drawings are reviewed and accepted by the examiner.

### **Priority**

3. Receipt is acknowledged of paper submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **Information Disclosure Statement**

4. The information Disclosure Statement (IDS) Form PTO-1449, filed on 9/21/2006 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosed therein was considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Public 20030207696A1 (hereinafter Willenegger) in view of US Patent Application Public 20050015583A1 (hereinafter Sarkkinen).

Regarding claim 16, the limitation “A mobile communication system using HSDPA (High Speed Downlink Packet Access) in which one physical channel is used by a plurality of mobile stations in common in a time division form and scheduling for executing radio transmission on the physical channel is conducted by a base station” is met by Willenegger teaches in (paragraph [0138] The HSDPA channel structure is a channel structure capable of transmitting data for multiple services (or recipients) using a particular multiplexing scheme. One such HSDPA channel structure is the HDR (high data rate) channel structure that transmits data in a time-division multiplexed (TDM) manner over a single high-speed physical channel) as instant application;

Although Willenegger does not explicitly teach “wherein the base station has a ciphering function of preventing control signals and user information directed to the mobile station from being intercepted illegally in a radio section, and wherein a ciphering counter used for the ciphering function comprises an HFN (Hyper Frame Number) and an SFN (Cell System Frame Number counter)”. However, attention is directed to Sarkkinen, which teaches in ([0108] The ciphering unit is a unit either in CN or UTRAN, which consists of encryption algorithm, which uses specific input parameters to perform required ciphering transaction to the data meant to be encrypted, and addition in [0112] To support

Art Unit: 4133

encryption for such services as the multicast services the currently used set of input parameters COUNT-C, DIRECTION and BEARER used in the ciphering unit are not applicable any more. Further teaches in paragraph [0113] COUNT-C is a time dependent input, which consist of the MAC-d HFN (Hyper Frame Number, a parameter) value and CFN (Connection Frame Number, a parameter used by such services, which are using transparent RLC mode) or SFN (Sequence Frame Number, a parameter used by such services, which are using either unacknowledged or acknowledged RLC mode), which both are dependent of the current state of the data transmission and the transmission instance on the air interface. It is noted that HFN is a Hyper Frame Number, which is a parameter, CFN is a Connection Frame Number and SFN is a Sequence Frame Number, which are also a parameters).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Willenegger invention by employing the teaching as taught by Sarkkinen to provide the key stream is generated by using the ciphering algorithm f8, which uses a ciphering key and various input parameters COUNT-C, BEARER, DIRECTION, LENGTH etc. See paragraph 111. Doing so would merely involve using known technique (comprising the steps of encrypting a multicast message by using ciphering, and sending the encrypted multicast message to the plurality of user entities simultaneously) to improve similar device (wireless communication system) in the

Art Unit: 4133

same way (encrypt a multicast message by using ciphering, and to send the encrypted multicast message to the plurality of user entities.

Regarding claim 17 has limitations similar to those treated in the above rejection(s), and are met by the references as discussed above.

Regarding claim 18 is drawn to the method used by the corresponding apparatus 16 and are rejected for the same reasons of obviousness used above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHUONG A. NGO whose telephone number is 571-270-7264. The examiner can normally be reached on Monday 7:00AM to 5:30PM, Tuesday through Thursday 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Abul Azad can be reached on 571-272-7599. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4133

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CHUONG A NGO/  
Examiner, Art Unit 4133

/ABUL AZAD/  
Supervisory Patent Examiner, Art  
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